



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,328	03/25/2004	Atsushi Uejima	07250029aa	5421
30743	7590	02/24/2006	EXAMINER	
WHITHAM, CURTIS & CHRISTOFFERSON, P.C. 11491 SUNSET HILLS ROAD SUITE 340 RESTON, VA 20190				MARTIN, LAURA E
		ART UNIT		PAPER NUMBER
		2853		

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H'A

Office Action Summary	Application No.	Applicant(s)	
	10/808,328	UEJIMA, ATSUSHI	
	Examiner Laura E. Martin	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 March 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-4 and 6 is/are rejected.
 7) Claim(s) 5 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 08 July 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/20/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US 6111044) in view of Higashiyama (JP 02307731).

Yamamoto et al. teaches a method of preparing a hard copy by forming a transparent coating layer (column 11, lines 30-58) on a recording medium in areas where image has been recorded, comprising steps of: applying clear droplets clear droplets to a recording medium and curing said clear droplets, wherein a curing intensity of said curing step that is to be performed on said droplets is adjusted in accordance with the image as recorded on said recording medium (column 11, lines 30-58) and wherein an adjustment of the intensity of said curing step is to be performed on said droplets is for chaining viscosity of said droplets (column 11, lines 30-58); and wherein said droplets contain a thermosetting resin material and said curing step comprises applying infrared radiation to said droplets while in flight (column 11, lines 30-52)

Yamamoto et al. does not teach curing droplets flying from a recording head and curing said droplets while in flight or depositing said cured droplets in

said image-recorded areas of said recording medium so as to form said coating layer.

Higashi yama teaches curing droplets flying from a recording head and curing said droplets while in flight or depositing said cured droplets in said image-recorded areas of said recording medium so as to form said coating layer (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of preparing a hard copy as taught by Yamamoto et al. with the disclosure of Higashiyama in order to create a stronger and more durable printed image.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US 6111044) and Higashiyama (JP 02307731) and further in view of Kawamata et al. (US 4952444).

Yamamoto et al. and Higashiyama teach the method of preparing a hard copy in claim 1; however, neither disclose the surface roughness of said coating layer that is formed of said droplets as they have been deposited and hardened is adjusted by changing the viscosity of said droplets as they are deposited on said recording medium.

Kawamata et al. teaches disclose the surface roughness of said coating layer that is formed of said droplets as they have been deposited and hardened is adjusted by changing the viscosity of said droplets as they are deposited on said recording medium (column 3, lines 1-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of preparing a hard copy taught by Yamamoto et al. as modified in order to create a stronger printed image.

Allowable Subject Matter

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin



2/21/06
MANISH S. SHAH
PRIMARY EXAMINER